

# Southern Standard

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## SAMPLE COPIES.

We send copies of the STANDARD this week to many persons who are not subscribers, with the hope that they may be pleased with the paper and send us the subscription price, \$1 per annum. The STANDARD is the only weekly agricultural paper published in the State. It is a plain country paper, intended more for usefulness than for show, with clear, easy print that children and old people can read with ease. We think the paper when carefully examined, will recommend itself, and soon become a welcome visitor to every one to whom we may send it for examination. We would be glad to send a few sample copies to any person who may desire to see it, and would thank our friends for the names of such.

## Communications.

### Experiments in Farming.

To the Standard.

"A great advantage would result to agriculture if every intelligent farmer would pursue some systematic course of experiments on such a scale and variety as his circumstances would justify, and give the results, whether successful or otherwise, to the community." If successful it would profit others; if not, it would stand as a warning. Such could not be otherwise than promotive of the public good.

The mutual communication of improvements in agriculture has the effect of benefitting not only the community generally, but even the authors themselves, as they frequently elicit corrections and modifications which materially enhance the value of the discovery.

These experiments may embrace any one or more of all the subjects connected with American agriculture. It might embrace soils and their improvement, manures of every kind—alkaline, vegetable and putrescent—and their effects on different soils and crops; plants of every variety and their adaptation to different soils, under different circumstances and with varied manures, and their relations to each other, both as successors in rotations, and their value for conversions into animals and other forms, and their comparative ultimate profit; draining, both surface and covered; the improvements of implements and mechanical operations, etc. It should also extend to animals, their treatment, food and general management, and the results.

Although much has been accomplished within the last few years, the science and practice of agriculture may yet be considered in its infancy. There is an unbounded field still open for exploration and research, in which the efforts of persevering genius may hereafter discover mines of immense value to the human family.

We intend to practice our preaching herein, and teach how wheat raising may be made to pay. The people shall know results.

E. L. GARDENHIRE.

From Viola.

To the Standard.

VIOLA, July 9.—Viola as well as other important points, has been blessed with a refreshing shower, and farmers are more lively since. Wheat is not yielding as well as it should in this section. The potato crop is fine.

Arna St. John has been under the weather the past week—I don't think it was love. He is up now. Milton Hoover has his corn chopped out now so he can follow the rows without stakes. The readers of the STANDARD at Viola are pleased to see it enlarged. It was interesting before, but is more so now.

Viola Mills are being repaired by Mr. J. A. Anderson, of Wartrace. Forty pounds to the bushel is expected after the completion.

OLD VETER.

## From Hill's Creek.

To the Standard.

A few days since a party of young folk of this neighborhood assembled at the school house near Col. H. L. W. Hill's, and spent a most enjoyable day pic-nicing. The house in which the dinner was spread was tastefully decorated with evergreens and flowers of every hue and color. We feel it our duty to compliment the young ladies on their skill and taste in preparing a public dinner, for almost everything pleasing to the palate was there. Fruits of every variety were in abundance. Thanks to the ladies for that dinner.

ONE OF THE PARTY.

## From Vervilla.

To the Standard.

VERVILLA, July 2.—Last Thursday we had the pleasure of witnessing the closing exercises of the Hannah Highland School at Vervilla, under charge of Prof. D. H. Bryan. The way in which the examination was conducted gave complete satisfaction and showed that the students had been at work and had fully realized the worth of their money. Prof. Bryan is a teacher full of energy and enthusiasm, and teaches the true Normal system. His thorough and practical way of teaching far surpasses the old ways and leaves no room to be suspected of a prepared examination. The examination exercises closed at two o'clock, after which Prof. W. T. Payne, of McMinnville, delivered an address upon the educational interests of the South. He fully demonstrated the faults displayed in the old mode of teaching, and set forth in a clear, clean-cut style the great advantages of a more modern system in order to keep pace with the demands of our day. During Prof. Payne's visit to Vervilla he paid Viola a visit, and we learn delivered an appropriate address to the patrons of that school, which was highly appreciated.

We learn that the teachers of this section propose to organize a Teachers' Institute at Vervilla, Saturday, July 14th, and the teachers of Warren county are cordially invited to attend and assist in the organization of the same.

CRITICAL OBSERVER.

## Plant Peas.

Correspondent in Southern World.

The seasons that usually occur in June should be taken advantage of to put in every acre possible in peas. For this purpose the wheat and oat fields that have just yielded their harvest are well adapted. We trust that no arguing is necessary to convince the reading and progressive farmer of the importance of adding vegetable matter to the soil to supply the place of the original humus that has been well nigh exhausted from most of the cultivated soils of the South. Not only do green crops (plowed in or permitted to decay first on surface) add vegetable matter to the soil, but the operation adds largely to the store of available inorganic food—the ash element of plants—to the soil. It may be asked how does a crop that is grown upon the soil and largely supplied by the soil, add anything to the soil except that portion of the crop taken from the air? We add that it does not absolutely add anything to the percentage of ash elements in the soil upon which it grew; but practically it does add a great deal to the percentage of available food in the soil. How is this done? First, the plants usually employed in renovating soils—the legumes—the pea and clover family—have long taproots which descend deeply into the subsoil and bring up stores of lime, potash, phosphoric acid, magnesia, sulphuric acid and other mineral food that were out of convenient reach of the ordinary crops of corn, wheat, and even cotton. By decay of the crop this supply of new food is left at or just beneath the surface where the roots of future crops can readily reach and absorb them. Not only this, but these plants seem to have a pecu-

liar power, inherent and vital, of availing themselves more readily of the elements of plant food that are convenient enough to other plants but in too crude or insoluble condition for their use. But one of the most important benefits conferred consists in the chemical action that takes place as a result of the incorporation of a mass of decaying organic matter into the soil. The evolution of carbonic and other acids, the absorption of ammonia from the air and its conversion into nitric acid in the soil and other changes, work a corresponding transformation in the composition of the soil. The phosphates and carbonates of lime, magnesia and iron, and other more or less insoluble substances are rendered soluble and available to plants by the chemical action set up and maintained in the soil by the presence of decaying vegetable matter. These changes are moreover greatly facilitated by the presence of moisture which humus has the property of attracting from the atmosphere. This hygroscopic property or power of absorbing and retaining moisture from the atmosphere, is also very valuable to the growing crops in time of drouth.

Every farmer has noticed the great improvement that is manifest in the soil from which a fence had been removed after several years' standing. This has been caused by the spontaneous growth of weeds, briars, bushes, etc., which have been allowed to spring up in the fence corners, shading the land, shedding their leaves upon it and filling the soil with their roots. In this case nothing has been added to the soil except what grew upon it, and yet the soil has been made rich by their operation and almost proof against the effect of a drouth. What has been done by the slow and unassisted agency of the growth of a fence row, may be imitated on a large scale and greatly accelerated by the substitution of plants better adapted to the purpose, by cultivation and the addition of phosphates and potash to aid the growth of the plants.

We have only incidentally alluded to the fact that peas, clover and such like plants draw very largely from the atmosphere; and one of the most important elements which they obtain from this source—one which costs the farmer if purchased, twice as much per pound as any other element—is ammonia. This element is taken by the plant from the air, in some way not well understood, either through the roots or by way of the leaves, and is left in the soil by the plant.

We advise that the peas be planted in drills about two and a half to three feet wide, sowing the seed continuously or dropping every "step" eight to ten peas. From one peck to half a bushel of seed will plant an acre. The crop may succeed without any fertilizer or any cultivation, but it will pay better to apply about 150 or 200 pounds of acid phosphate per acre, and give one plowing. The object is to induce as rapid and luxuriant growth as possible.

The latest received opinion is to the effect that it is not necessary to plow under the vines in order to get the full benefit of the operation. It is certainly not advisable to turn up the soil in mid summer or early autumn to the influences of the sun, unless the soil be immediately planted in another crop.

We urge upon farmers to plant every available space in peas.

The value of the five leading crops in the United States in 1882 was in the following order: Corn \$784,867,175; wheat \$444,602,125; hay \$369,938,158; oats \$182,978,022; potatoes \$95,304,844.

Women are called the "weaker sex," and yet, up to the hour of going to press, not one of her sex in this country has shown enough intellectual weakness to embark in the weather prophet business or attempt to eat sixty quail in thirty days.

## The Second Potato Crop.

C. W. Calender, in Southern Industries.

The second potato crop is usually more profitable than the first; it furnishes our winter supply, our next spring's seed, and a large surplus for sale. It is produced as follows:

In the beginning of July, the ground, usually the same upon which the first crop was raised, is prepared by deep plowing and thorough harrowing. It would be better to raise the second crop upon a different plat from that on which the first was planted. Two crops in one year must, of necessity, soon exhaust the richest soil; it would certainly seem more profitable for the farmer to raise his early crop for market upon his quick, fresh land. It is asserted, however, by some that after land has been double cropped in potatoes for even three or four years, it will produce any other as well as if it had never been so tilled, but this assertion is open to much doubt.

After the soil is properly prepared, it is laid off in drills, with a one horse plow about 30 inches apart, in order that two furrows may properly clean each middle. As the great difficulty with the second crop is to get a good stand, at least twice as much seed is dropped in the drills as is expected to come up. Much of it rots, or from other causes fails to grow. The potatoes at this planting, are covered with two furrows with a one-horse plow to insure the requisite moisture for germination. As soon as they begin to sprout, which must be ascertained by digging into the ridges, the land is leveled by a harrow or, better still, by a drag, so that the plant may make rapid growth and so mature its tubers before frost. As soon as the weeds begin to appear between the ridges, the crop is plowed; another plowing when the plants are a few inches high is all the after cultivation needed.

As before stated, the chief difficulty in making a good second crop, is the obtaining of a good stand. The proper management of the seed has much to do in assuring success. Too much care cannot be exercised in protecting the seed from the blistering rays of the sun at the time of digging the first crop. If the second crop be planted on a bright, hot sunny day, the covering plow should follow the seed dropper as closely as possible. After the seed have been duly seasoned in the shade, it is cut lengthwise, i. e., from stem to blossom end; and all the tubers too small to be cut in that manner must be "scalped," i. e., a slice must be cut from the stem end. If this be omitted such potatoes will not come up at all, or at least not in time to mature tubers before frost. In order to fairly test this fact, I planted two rows of Early Rose potatoes, seed uncut, about 1½ inches in diameter. Scarcely any of them came up, while the scalped seed on each side of them did as well as usual. I also selected twenty-three Beauty of Hebron, of the same size as above and planted them uncut, beside twenty-three of the same scalped. I got seventeen good plants from the latter lot; but none of the former came up in time to make seed.

Seed for the second crop should not be allowed to heal over, as the seed for the spring crop, but should be planted as soon as cut. But one person of a number consulted got a stand from "heal-over" seed. Those who planted the seed as soon as cut, and covered immediately, in damp ground, with two furrows, succeeded best. Just before or directly after a rain, if the soil be in good working order, is the most favorable time for planting. Some crops utterly failed this year from being planted in dry hot soil; the seed all rotted.

The Early Rose is the only potato yet used in "second cropping," and some assert that no other variety will succeed. I am satisfied this idea is erroneous. I purchased my seed for first crop last year in Buffalo, N. Y.,

and at the same time some Northern Peach Blows. A few of the latter, accidentally, got among the Early Rose and when the first crop was dug I got Peach Blows of good marketable size. I shall try a few bushels of them this spring.

I may remark, in passing, that although I planted my Northern seed a week or ten days before my neighbors planted Tennessee second crops, I was in the market ten days behind them. In my report of test of seeds sent me last year by the department, I mentioned that I had succeeded in double cropping the Beauty of Hebron; I succeeded as well with them as with the Early Rose.

I think seed of any kind raised here late in the fall will be superior to that maturing during our hot summers and early autumn months. Perhaps by this method we can prevent the deterioration of vegetables, so common in our climate; and again, as in the potato, a seed that will yield us earlier and better returns. I propose trying the experiment with peas.

## The Midnight Sun.

In this Latitude the sun goes down at night and we retire to our couches and sleep. In the morning the sun returns, and we begin our daily avocations. In the Arctic regions in the spring the sun never sets. There is no mornings and no nights there; it is one continuous day for months. At first it seems hard to understand this strange thing in nature. One never knows when to sleep. The world appears to be wrong, and man is nervous and restless. Sleep is driven from his very eyelids, his appetite fails and all the disagreeable results of protracted vigils are apparent. But gradually he becomes used to this state of affairs, devises means to darken his tent, and once more enjoys his rest. In fact, he learns how to take advantage of the new arrangements, and when traveling pursues his journey by night, or when the sun is lowest, because then he finds the frost which hardens the snow a great assistance in sleighing.

## Rapid Growth.

The fancies of the "Arabian Nights" are facts of to-day. One Monday a number of laborers laid the last rails of a railroad which terminated in a broad and wild prairie. The next Saturday night the prairie was dotted with houses, half a dozen dry goods stores, and as many groceries, a livery stable and stock yard, three blacksmith shops fourteen or fifteen eating houses, and fifteen or twenty saloons, those great forerunners of American civilization. Three hundred people had become citizens, and the prairie had become the town of Abeline. On Sunday morning the church bells rang out and the worshippers knelt where seven days before was a wilderness. Two weeks later the population aggregated fifteen hundred, and thirty-five hundred visitors came to attend the sale of town lots; one hundred and thirty-nine lots were sold for \$24,505. This is the modern realization of the fanciful story of Aladdin's palace.

A cow at Enterprise, Miss., recently gave birth to three calves. Thus does Enterprise re-veal the freaks of nature.—The Judge.

Hens may be a little backward on eggs, but they never fail to come to the scratch where flower-beds are concerned.

A Brooklyn girl has been much worried since the first of the month. Her lover has moved next door, and she is afraid he will see her hanging out the washing and expect her to do it after she is married.

A fine specimen of southern lumber will appear at the Louisville exhibition from Alabama in a cypress board 3 inches thick, 17 feet long, and 4 feet 8½ inches wide.